



PTO/SB/08a/b (08-03)

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Substitute for form 1449A/B/PTO			<b>Complete If Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>			Application Number	09/944328	
			Filing Date	August 31, 2001	
			First Named Inventor	Brig B. Elliott	
			Art Unit	2131	
			Examiner Name	A. Sherkat	
Sheet	1	of	2	Attorney Docket Number	BBNT-P01-134

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
89	AA	US-2002/0025041	02-2002	Tomita, Akihisa	
	AB	US-2003/0002074	01-2003	Nambu et al.	
	AC	US-2003/0059157	03-2003	DeCusalis et al.	
	AD	US-2004/0005056	01-2004	Nishioka et al.	
	AE	US-2004/0008843	01-2004	Van Enk, Steven J.	
	AF	US-5,515,438	05-1996	Bennett et al.	
	AG	US-5,720,608	03-1998	Janson et al.	
	AH	US-6,151,586	11-2000	MacDonald et al.	
	AI	US-6,188,768	02-2001	Bethune et al.	
	AJ	US-6,289,104	09-2001	Patterson et al.	
	AK	US-6,378,072	04-2002	Collins et al.	
	AL	US-6,539,410	03-2003	Klass, Michael Jay	
	AM	US-6,801,626	10-2004	Nambu, Yoshihiro	
	AN	US-6,986,056	01-2006	Dultz et al.	
	AO	US-7,035,411	04-2006	Azuma et al.	
	AP	US-6,160,651	12-2000	Chang et al.	
	AQ	US-5,729,608	03-1998	Janson et al.	
	AR	US-6,052,465	04-2000	Gotoh et al.	
	AS	US-6,778,557	08-2004	Yuki et al.	
	AT	US-6,895,092	05-2005	Yomita	
	AU	US-2002/0141019	10-2002	Chang et al.	
	AV	US-6,519,062	02-2003	Yoo, Sung-Joo	
	AW	US-6,145,024	11-2000	Maezawa et al.	
	AX	US-6,647,010	11-2003	Ford et al.	
	AY	US-6,799,270	09-2004	Bull et al.	
	AZ	US-5,307,410	04-1994	Bennett	
	AA1	US-2004/0165884	08-2004	Al-Chalabi, Salah	
	AB1	US-6,594,055	07-2003	Snawerdt, Peter	
	AC1	US-4,770,535	09-1988	Kim et al.	
	AD1	US-2004/0190725	09-2004	Yuan et al.	

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				Examiner Name	A. Sherkat
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<input checked="" type="checkbox"/>	CA	Bennett, C.H., et al., "Experimental Quantum Cryptography," J. Cryptology, 5:3-28 (1992).	
<input checked="" type="checkbox"/>	CB	Bennett, C.H., "Quantum Cryptography Using Any Two Nonorthogonal States," Physical Review Letters, 68(21):3121-3124 (1992).	
<input checked="" type="checkbox"/>	CC	Butler, W.T., et al. "Free space quantum-key distribution," Physical Review A, 57(4):2379-2382 (April 1998).	
<input checked="" type="checkbox"/>	CD	Jacobs, B.C., et al., "Quantum cryptography in free space," Optics Letters, 21(22):1854-1856 (November 1996).	
<input checked="" type="checkbox"/>	CE	Bethune, D.S., et al., "An Autocompensating Fiber-Optic Quantum Cryptography System Based on Polarization Splitting of Light, IEEE Journal of Quantum Electronics, 36(3):340-347 (2000)	

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

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	CB	Buttler, W.T. et al. Free-space quantum-key distribution. Physical Review A. 57:4, 2379-82 (April 1998)		
	CC	Jacobs, B.C. et al. Quantum cryptography in free space. Optics Letters. 21:22, 1854-56 (November 1996)		

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

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		Number-Kind Code <sup>2</sup> (# known)	MM-DD-YYYY		
70	AA*	US-4,445,116	04-24-1984	Grow	
	AB*	US-4,649,233	03-10-1987	Bass et al.	
	AC*	US-5,469,432	11-21-1995	Gat	
	AD*	US-5,502,766	03-26-1996	Boebert et al	
	AE*	US-5,535,195	07-09-1996	Lee	
	AF*	US-5,710,773	01/1998	Shiga, Tomohisa	
	AG*	US-5,768,391	06-16-1998	Ichikawa	
	AH*	US-5,805,801	09/1998	Holloway et al	
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	AJ*	US-6,028,935	02-22-2000	Rarity et al.	
	AK*	US-6,097,696-A	08/2000	Doverspike, Robert D.	
	AL*	US-6,122,252	09/2000	Aimoto et al	
	AM*	US-6,233,075	05/2001	Chang et al	
	AN*	US-6,233,393	05/2001	Yanagihara et al	
	AO*	US-6,463,060	10/2002	Sato et al	
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	AQ*	US-6,563,796	05/2003	Saito, Hiroshi	
	AR*	US-6,678,379-B1	01/2004	Mayers et al	
	AS*	US-6,684,335	01/2004	Epstein et al.	
	AT*	US-5,311,572	05/1994	Friedes et al.	
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AW*	US-6,529,498	03/2003	Cheng, Dean		
AX*	US-6,538,990	03/2003	Prorock, Thomas Joseph		
AY*	US-6,560,707	05/2003	Curtis, et al.		
AZ*	US-6,654,346	11/2003	Mahalingaiah et al.		
AA1*	US-6,678,379	01/2004	Mayers et al.		
AB1*	US-6,754,214	06/2004	Mahalingaiah, Rupaka		
AC1*	US-6,836,463	12/2004	Garcia-Luna-Aceves et al.		
AD1*	US-5,764,765	06/1998	Phoenix et al.		

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				Art Unit	2131
				Examiner Name	J.E. Jackson
Sheet	2	of	3	Attorney Docket Number	BBNT-P01-134

		and/or country where published.	
	CA	"Quantum key distribution: Real-time compensation of interferometer phase drift," NTNU Department of Physical Electronics, pages 1-45.	
	CB	Bennett, C.H., et al., "Experimental Quantum Cryptography," Journal of Cryptography's special issue after Eurocrypt '90, 28 pages (September 1991).	
	CC	Bennett, C.H., et al., "Generalized Privacy Amplification," IBM Research, 24 pages (May 31, 1995).	
	CD	Brassard, G., et al., "Cryptology Column - 25 Years of Quantum Cryptography," Pragocrypt, pp. 13-24 (July 1996).	
	CE	Brassard, G., et al., "Secret-Key Reconciliation by Public Discussion," Department IRO, Universite de Montreal, 14 pages (1994).	
	CF	Ekert, A.K., "Quantum Cryptography Based on Bell's Theorem," Physical Review Letters, 67(6):661-663 (1991).	
	CG	Elliott, B.B., et al., "Path-length control in a interferometric QKD link," Proc. of SPIE, Vol. #5101, 11 pages (April 21, 2003).	
	CH	Elliott, C., "Building the quantum network," New J. Phys., 4:46 (2002).	
	CI	Franson, J.D., "Bell Inequality for Position and Time," Physical Review Letters, 62(19):2205-2208 (1989).	
	CJ	Gisin, N., et al., "Quantum cryptography and long distance Bell experiments: How to control decoherence," Geneva, Switzerland, pages 1-7 and 4 pages of drawings (January 15, 1999).	
	CK	Gisin, N., et al., "Quantum cryptography," Reviews of Modern Physics, 74:145-184 (2002).	
	CL	Jennewein, T., et al., "Quantum Cryptography with Entangled Photons," Physical Review Letters, 84(20):4729-4732 (2000).	
	CM	Maurer, U., et al., "Information-Theoretic Key Agreement: From Weak to Strong Secrecy for Free," Computer Science Department, Swiss Federal Institute of Technology, 20 pages (2000).	
	CN	Maurer, U.M., "Secret Key Agreement by Public Discussion From Common Information," IEEE Transactions on Information Theory, 39:733-742 (1993).	
	CO	Mo, X., et al., "Intrinsic-Stabilization Uni-Directional Quantum Key Distribution Between Beijing and Tianjin," Key Lab of Quantum Information, Department of Electronic Engineering and Information Science, University of Science and Technology of China, Hefei, Anhui.	
	CP	Naik, D.S., et al., "Entangled State Quantum Cryptography: Eavesdropping on the Ekert Protocol," Physical Review Letters, 84(20):4733-4736 (2000).	
	CQ	Ribordy, G., et al., "Long-distance entanglement-based quantum key distribution," Physical Review A, Volume 63, 012309-1-012309-12 (2001).	
	CR	Scarani, V., et al., "Quantum Cryptography Protocols Robust Against Photon Number Splitting Attacks for Weak Lazer Pulse Implementations," Physical Review Letters, 92(5):057901-1 through 057901-4 (February 2004).	
	CS	Scarani, V., et al., "Quantum cryptography protocols robust against photon number splitting attacks," ERATO Conference on Quantum Information Science 2003, September 4-6, 2003, Nijijimakaikan, Kyoto Japan; 2 pages.	
	CT	Schneier, B., "Applied Cryptography," Second Edition, Chapter 10, October 18, 1995, Wiley & Sons Publ., pp. 216-220.	
	CU	Slutsky, B., et al., "Defense frontier analysis of quantum cryptographic systems," Applied Optics, 37(14):2869-2878 (1998).	
	CV	Stucki, D., et al., "Quantum Key Distribution over 67 km with a plug&play system," New Journal of Physics, 4:1-41.8 (2002).	
	CW	Tanzilli, S., et al., "PPLN waveguide for quantum communication," Eur. Phys. J.D., 18:155-160 (2002).	
	CX	Tittel, W., et al., "Long-distance Bell-type tests using energy-time entangled photons," Physical Review A, 59(6):4150-4163 (1999).	

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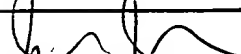
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<input checked="" type="checkbox"/>	CY	Degermark, M., et al., "Small Forwarding Tables for Fast Routing Lookups," ACM, pages 3-14 (1997).	
	CZ	Estrin, D., et al., "Security Issues in Policy Routing," IEEE, pages 183-193 (1989).	
	CA1	Garcia-Luna-Aceves, J.J., et al., "Distributed, Scalable Routing Based on Vectors of Link States," IEEE Journal on Selected Areas in Communications, 13(8):1383-1395 (October 1995).	
	CB1	Garcia-Luna-Aceves, J.J., et al., "Scalable Link-State Internet Routing," Network Protocols (October 13-16, 1998).	
	CC1	Lakshman, T.V., et al., "High-Speed Policy-based Packet Forwarding Using Efficient Multi-dimensional Range Matching," Proceedings of the ACM SIGCOMM'98 conference on Applications, technologies, architectures and protocols for computer communication, pages 203-214 (1998).	
	CD1	Lampson, B., et al., "IP Lookups Using Multiway and Multicolumn Search," IEEE/ACM Transactions on Networking, 7(3):324-334 (June 1999).	
	CE1	Ramanathan, R., et al., "Hierarchically-organized, multihop mobile wireless networks for quality-of-service support," Mobile Networks and Applications, 3:101-119 (1998).	
	CF1	Tsai, W.T., "An Adaptive Hierarchical Routing Protocol," IEEE Transactions on Computers, 38(8):1059-1075 (August 1989).	
	CG1	Waldvogel, M., et al., "Scalable High Speed IP Routing Lookups," ACM, pages 25-36 (1997).	
	CH1	Bowers, J.E., "Optical Network and Component Trends," UCSB, NSF Workshop, 51 pages.	
	CI1	Honjo, T., et al., "Differential-phase-shift Quantum Key Distribution," NTT Technical Review, 2(12):26-33 (Dec. 2004).	
	CJ1	Nambu, Y., et al., "BB84 Quantum Key Distribution System based on Silica-Based Planar Lightwave Circuits," Fundamental and Environmental Research Laboratories and Fiber Optic Devices Division, pages 1-11.	
	CK1	Paniccia, M., "Silicon Integrated Photonics," UCSB, 30 pages, February 2, 2005.	
	CL1	Tomita, A., et al., "Recent Progress in Quantum Key Transmission," NEC J. of Adv. Tech., 2(1):84-91 (Winter 2005).	

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<b>Substitute for form 1449A/B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	09/944328
				Filing Date	August 31, 2001
				First Named Inventor	Brig B. Elliott
				Art Unit	2131
				Examiner Name	Not Yet Assigned
Sheet	1	of	1	Attorney Docket Number	BBNT-P01-134

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA	US-20030231771-A1	12-18-2003	Gisin et al.	
	AB	US-5,764,767	06-09-1998	Beimel et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
		Country Code <sup>2</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	MM-DD-YYYY			

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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	Cabello, A., "Multiparty key distribution and secret sharing based on entanglement swapping," pp. 1-8 (September 7, 2000).	
	CB	Crepeau, C., et al., "Secure Multi-party Quantum Computation," ACM, pp. 1-10 (20001).	
	CC	Gottesman, D., et al., "Secure quantum key distribution using squeezed states," pp. 1-19 (September 25, 2000).	
	CD	Xiao, L., et al., "Efficient Multi-Party Quantum Secret Sharing Schemes," pp. 1-7 (May 28, 2004).	

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Examiner Signature		Date Considered	10/26/06
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		Number-Kind Code <sup>2</sup> (if known)			
	AA	US-6,678,379-B1	01/2004	Mayers et al	
	AB	US-6,507,012-B1	01/2003	Medard et al	
	AC	US-6,097,696-A	08/2000	Doverspike, Robert D.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	MM-DD-YYYY			

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Sheet 1 of 2

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09/944028  
08/31/06

INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	Atty. Docket No. 00-4069	Serial No. Unassigned
	Applicant Brig Barnum Elliott	
	Filing Date Herewith	Group Unassigned

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	AB	5,307,410	4/26/94	Bennett	380	21	
	AC	5,414,771	5/9/95	Fawcett, Jr.	380	44	
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	AE	5,732,139	3/24/98	Lo et al.	380	28	
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

GA	BA	DeBashis Basak, Daniel O. Awduche, John Drake and Yakov Redhter, Multi-protocol Lambda Switching: Issues in Combining MPLS Traffic Engineering Control with Optical Cross-connects, IETF Internet Draft Memo, <a href="http://www.ietf.org/shadow.html">http://www.ietf.org/shadow.html</a> , February 2000, page 1-9.					
	BB	Daniel O. Awduche, Yakov Rekhter, John Drake and Rob Coltun, Multi-protocol Lambda Switching: Combining MPLS Traffic Engineering Control with Optical Crossconnects, IETF Internet Draft Memo, <a href="http://www.ietf.org/shadow.html">http://www.ietf.org/shadow.html</a> , January 2001, pages 21.					
	BC	Charles H. Bennett and Gilles Brassard, Quantum Cryptography: Public Key Distribution and Coin Tossing, Intl. Conf. On Computers, Systems & Signal Processing, Bangalore, India, Dec. 10-12, 1984, 5 Pages.					
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	BE	D.S. Bethune and W.P. Risk, An Autocompensating Fiber-Optic Quantum Cryptography System Based on Polarization Splitting of Light, IEEE Journal of Quantum Electronics, Vol. XX, No. Y, 1999.					
	BF	Graham P. Collins, Quantum Cryptography Defies Eavesdropping, Physics Today, Nov. 1992, page 21-23.					

Examiner	Date Considered
<i>[Signature]</i>	10/26/06

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
Applicant Brig Barnum Elliott	
Filing Date Herewith	Group Unassigned
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	AO	6,130,780	10/10/00	Jaonnopoulos et al.	359	584	
	AP	6,154,586	11/28/00	MacDonald et al.	385	18	
	AQ	5,339,182	8/16/94	Kimble et al.	359	112	
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		Document Number	Date	Country	Class	Sub Class	Translation
							Yes No

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	BG	L.Y. Lin, E.L. Goldstein and R.W. Tkach, Free-Space Micromachined Optical Switches for Optical Networking, IEEE Journal of Selected Topics in Quantum Electronics, Vol. 5, No. 1, January/February, 1999.					
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